

Table 1. Coverage of existing relevant reports on items of drafted pandemic agreement in Uzbekistan

Item	Joint External Evaluation of IHR Core Capabilities (Republic of Uzbekistan, 16-20 May 2022)		Others		
	Indicator	Specific details	Description/ Results	Source	
Article 4 : Pandemic Preparedness					
1	Status of IHR Implementation (JEE)	1. The National Action Plan for implementing the International Health Regulations (IHR 2005) was approved by the Ministry of Health of Uzbekistan in January 2020 and the country is moving forward with practical steps. 2. Uzbekistan underwent its first Joint External Evaluation (JEE) of its core capacities for International Health Regulations (IHR) in May 2022	During the JEE mission, Uzbekistan's capacities in 19 technical areas were evaluated through a peer-to-peer, collaborative process that brought national subject matter experts together with members of the JEE team for a week of discussion, collaboration and field visits. This process led to consensus on scores and 75 priority actions across those 19 technical areas.	Five overarching recommendations emerged from the JEE mission: 1. Write a summary plan that describes and facilitates all national processes for responding to IHR related events. 2. Adopt a five-year National Action Plan for Health Security (NAPHS), based on the JEE report and contextualized for Uzbekistan, that prioritizes funding needs and creates time frames for each action. 3. Strengthen the public health workforce across the human and animal health sectors by establishing a National Public Health Institute and a system of national accreditation. 4. Enhance existing programs for regular training and exercising of all sectors, from local to national level, emphasizing joint work, cooperation, and standard procedures, and establishing a mechanism for implementing the lessons thereby identified. 5. Adopt and implement the One Health and all-hazards approaches throughout government, across sectors, and between ministries.	Joint external evaluation of IHR core capacities of Uzbekistan - Mission report 16-20 May 2022
2	Capacity for detecting and sharing pathogen genetic information	Uzbekistan has been actively enhancing its capacity to detect and share genetic information of pathogens through several initiatives: 1. Establishment of the Uzbek Genome Program ; 2. Designation of the Center of Genetic Technologies .	Uzbekistan does not have a publicly available plan or policy for sharing genetic data, clinical specimens, and/or isolated specimens (biological materials) along with the associated epidemiological data with international organizations and/or other countries that goes beyond influenza. (P. 83). However, the government is taking notable steps to enhance its capacity to detect and share pathogen genetic information: 1. In January 2025, the Ministry of Health of Uzbekistan partnered with M42, a global health technology company, to launch the Uzbek Genome Program . This initiative aims to develop in-country genomic and omics capabilities, facilitating early disease detection and supporting a shift towards preventive healthcare. 2. The Research Institute for Epidemiology, Microbiology, and Infectious Diseases (RIEMID) was designated as the Center of Genetic Technologies by a Presidential Decree in July 2020.	COMMITMENT TO SHARING OF GENETIC AND BIOLOGICAL DATA AND SPECIMENS GLOBAL HEALTH SECURITY INDEX, UZBEKISTAN 2021 MEF signs MoU with Uzbekistan to expand genomics research and innovation Strengthening detection, prevention and response to infectious disease threats in Uzbekistan	
3	Access to WASH	Strengthening action in Uzbekistan on Water and Sanitation and Protection of Water Resources from Accidental Pollution in the face of Climate Change project will be implemented by UNECE until the end of 2026, with funding from the Swiss Agency for Development and Cooperation (SDC). It is a joint project between two multilateral environmental agreements: the UNECE-WHO/Europe Protocol on Water and Health and the UNECE Convention on the Transboundary Effects of Industrial Accidents. Notably, Uzbekistan joined the Protocol on Water and Health as Party on 26 December 2023 , therefore becoming the first country in Central Asia to join this treaty.	Access to water and sanitation services is relatively low, with stark geographical disparities: 71% of the rural population has access to safe drinking water as compared with 89% in urban areas , with only 32% of domestic wastewater safely treated .	Uzbekistan commits to improving water and health governance and safe management of industrial and mining facilities, with support from UNECE and Switzerland	
4	Capacity for Medical Waste Management	In 2015, the Republic of Uzbekistan introduced "Sanitary rules and norms for collection, storage, and disposal of waste in medical and preventive treatment facilities" (SanPIN No. 0317-15) to establish uniform standards and procedures for medical waste management. Medical waste is divided into five classes: "A", "B", "C", "D" and "E" . Class A waste is non-hazardous wastes –having no contact with biological fluids of patients, infectious patients; Class B hazardous (risky) wastes - potentially contaminated waste: materials and tools contaminated with biological fluids (including blood, patient's discharge), pathological waste; organic surgical waste (organs, tissues, etc.); Class C acutely hazardous wastes- all materials being in contact with patients with special danger infections; Class D- includes expired drugs, mercury-containing devices, disinfectants not to be used; Class E- radioactive waste. (P. 17)	Despite these efforts, challenges persist, particularly in rural health facilities, due to limited infrastructure and resources . To address these issues, the government has initiated projects aimed at enhancing waste management practices, including the construction of facilities equipped with medical waste incinerators. Additionally, collaborations with private companies have been established to improve the disposal of medical waste, especially in urban areas.	MINISTRY OF HEALTH THE REPUBLIC OF UZBEKISTAN IMPROVEMENT OF THE EMERGENCY MEDICAL SERVICES PROJECT (HEALTH-4) ENVIRONMENTAL MANAGEMENT PLAN Framework Document	
5	Capacity to Combat AMR	P3.1 Effective multisectoral coordination on AMR P3.2 Surveillance of AMR P3.3 Infection prevention and control P3.4 Optimize use of antimicrobial medicines in human and animal health and agriculture	A draft inter-institutional national action plan does exist (the National AMR Control Programme 2022-2026) and reflects all elements of the WHO Global Action Plan on AMR. A state-of-the-art national AMR Centre with ISO-accredited referral laboratory capacities was established in 2017 , but only for human health. As part of a range of international projects, five pilot sites in human health facilities conduct AMR surveillance on eight specified pathogens of concern. An infection prevention and control (IPC) programme is in place in human health facilities , governed by several regulatory documents and enhanced in 2017 with the establishment of IPC commissions in all facilities.	AMR data are not yet reported to the Central Asian and European Surveillance of Antimicrobial Resistance (CAESAR) or the Global Antimicrobial Surveillance System (GLASS) , only information about the sites. There are no clear elements comprising an IPC system in the animal sector, although private farms do employ veterinarians and food safety is covered by laws on the quality and safety of food products. With support from the United States Agency for International Development (USAID) and in partnership with the Food and Agriculture Organization of the United Nations (FAO), Uzbekistan is focusing on improving how it regulates and controls the use of these crucial drugs across healthcare, agriculture, and the environment.	JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES OF UZBEKISTAN Mission report 16-20 May 2022 Uzbekistan Steps Up the Fight Against Antimicrobial Resistance (AMR) 2024 TmCSS Country Report on the Implementation of National Action Plan on Antimicrobial Resistance (AMR) Strengthening laboratory capacity to combat antimicrobial resistance in Uzbekistan: a collaborative monitoring programme
Article 5: One Health					
6	Presence of an integrated zoonotic disease surveillance system	Zoonotic disease surveillance systems exist for both human and animal health but are not yet integrated. Uzbekistan's Prioritized Zoonotic Diseases (8): Crimean-Congo hemorrhagic fever, Anthrax, Rabies, Brucellosis, Zoonotic tuberculosis, Plague, Zoonotic influenza (avian and swine), Echinococcosis.			
7	Availability of training programs on zoonotic diseases	P4.1 Coordinated surveillance systems in place in the animal health and public health sectors for zoonotic diseases/pathogens identified as joint priorities P4.2 Mechanisms for responding to infectious and potential zoonotic diseases established and functional	Guidelines for investigating outbreaks and deploying rapid response teams (RRTs) are available for zoonotic diseases. (P.4.2)	FAO and USAID Provide Training to Enhance Animal Health Protection in Uzbekistan. This training is part of the "Global Health Security" (GHS) Project - Strengthening animal health, One Health, and antimicrobial resistance capacities to prevent and mitigate zoonotic threats in Uzbekistan.	
8	Availability of guidelines on zoonotic diseases		Guidelines for investigating outbreaks and deploying rapid response teams (RRTs) are available for zoonotic diseases. (P.4.2)	Uzbekistan implemented Surveillance Evaluation Tool (SET) developed by FAO in 2021, which will provide guidance to the veterinary services as well as financial and technical partners on ways improve Uzbekistan's animal and zoonotic disease surveillance, and will contribute to a multifaceted approach to capacity building in the country, and in the region.	
9	The status of multi-sector collaboration related to zoonotic diseases (conference bodies, information infrastructure, etc.)		A multisectoral action plan on zoonotic diseases in place since November 2019.	Uzbekistan has made significant strides in multi-sectoral collaboration on zoonotic diseases. The One Health Zoonotic Disease Prioritization (OHZDP) Workshop, facilitated by CDC and supported by various ministries, exemplifies the successful integration of different sectors in the process of zoonotic disease prioritization. The strategic planning efforts, which resulted from multi-sectoral roundtables, have created an integrated approach for addressing zoonotic diseases through shared goals, responsibilities, and coordination mechanisms.	
Article 6: Preparedness, readiness and health system resilience					
10	Readiness to maintain essential health services during a crisis		Uzbekistan has developed a National action plan for health security (NAPHS) for 2024 – 2028.	The strategic goal of the 5-year NAPHS is to strengthen Uzbekistan's preparedness to better respond to health emergencies through the implementation of core capacities of the IHR. This goal is expected to be sustained by the following strategic actions : •Strengthening preparedness and planning for health emergencies to improve the capacities under the IHR through improvement of intersectoral relationships and coordination; •Improving early warning and detection of potential public health threats, including for emergency infectious diseases; •Improving capacities under the IHR and strengthening interministerial and intersectoral collaboration; •Implementing the "One health" and "all-hazards" approaches throughout the government, across sectors and between ministries.	
11	Workforce readiness for health emergencies	R1.1 Strategy emergency risk assessments conducted and emergency resources identified and mapped R1.2 National multisectoral multihazard emergency preparedness measures, including emergency response plans, are developed, implemented, and tested	Uzbekistan has developed a National Action Plan for Health Security (NAPHS) for 2024–2028, aiming to strengthen the country's preparedness to respond effectively to health emergencies by implementing core capacities of the International Health Regulations (IHR). The NAPHS outlines strategies to enhance the preparedness of Uzbekistan's health workforce for emergency responses.	National action plan for health security in Uzbekistan presented	
12	Capacity of Public Health Laboratories	D1.1 Laboratory testing for detection of priority diseases D1.2 Specimen referral and transport system D1.3 Effective national diagnostic network D1.4 Laboratory quality system	In Uzbekistan, the World Health Organization's (WHO) Better Labs for Better Health (Better Labs) initiative was deployed to tackle the issue of public laboratories, particularly those in rural areas, not being able to provide quality services for the detection, assessment, response, notification and monitoring of health threats.	In 2020, Uzbekistan's AMR Centre became the first laboratory to receive ISO-15189 accreditation from the National Accreditation Centre of Uzbekistan, a member of the International Laboratory Accreditation Cooperation (ILAC). Nationally, the number of COVID-19 laboratories was increased from 3 to 111 with a capacity of 35,000 tests per day . These laboratories are equipped with 150 sets of laboratory equipment for conducting PCR tests and are staffed with 510 laboratory workers , including doctors and laboratory technicians.	
13	Status of Biosafety and Biosecurity Capacities in Laboratories	P.6.1 Whole-of-government biosafety and biosecurity system in place for all sectors (including human, animal and agriculture facilities) P.6.2 Biosafety and biosecurity training and practices in all relevant sectors (including human, animal and agriculture)		The country has multiple regulatory and operational documents that outline procedures for recording, storing, handling, transferring, and transporting pathogens classified into four nationally defined pathogenicity classes. However, current biosafety and biosecurity methodologies and regulatory frameworks do not fully align with international standards. A considerable amount of national legislation, regulations, policies, and technical guidance is being drafted or planned to enhance and support capacity in this area, particularly by addressing compliance with international standards. Uzbekistan has also recently established a National Reference Laboratory that supervises the national laboratory system and maintains the national record and inventory of pathogens in facilities that store or process dangerous pathogens and toxins. (P25)	
14	Establishment and Functionality of Public Health Specialized Agencies	R1.1 Strategy emergency risk assessments conducted and emergency resources identified and mapped R1.2 National multisectoral multihazard emergency preparedness measures, including emergency response plans, are developed, implemented, and tested	Sanitary-Epidemiological and Public Health Committee Sanitary and Epidemiological Welfare and Public Health Committee for		
15	Status of Infection Prevention and Control (IPC) Measures	P7.1 Vaccine coverage (measles) as part of national programme P7.2 National vaccine access and delivery			
Article 7: Health and care workforce					
16	Number and deployment of health workers	D4.2 Human resources are available to effectively implement IHR		As of 2021, Uzbekistan had approximately 2.8 physicians per 1,000 people. The number of nurses and midwives is 5.8 per 1,000 people (2020).	
17	Status of legislation related to health human resources		The Labor Code of the Republic of Uzbekistan, updated as of August 20, 2015, governs employment relationships, including those in the health sector.	World Bank Data Labor Code of the Republic of Uzbekistan	
18	The Current Status of Healthcare Workforce Development System		Uzbekistan has a national workforce strategy, the Health System Development Strategy in the Republic of Uzbekistan for 2019-2025 .	One of the objectives of this strategy is to form an effective system of training, retraining and advanced training of medical personnel , and the development of medical science, including certification (accreditation) of scientific and medical educational institutions according to international standards, based on the introduction of modern educational programs, methods and technologies.	
19	Harassment situation				
Article 8: Monitoring and review					
	the provisions of this Article were moved to Article 6				
Article 9: Research and Development					
20	Clinical Trial Capacity		Uzbekistan's clinical trial capacity appears to be limited , with a relatively small number of trials registered on clinicaltrials.gov (As of February 2024, there are 44 studies registered at clinicaltrials.gov, with 8 open studies) and some reports suggesting lower quality in published trial reports compared to global trends	Clinical Trials in Uzbekistan Quality of evidence in a post-Soviet country: evaluation of methodological quality of controlled clinical trials published in national journals from Uzbekistan Analysis of country-level health research capacity for the ESSENCE on Health Research Initiative April 2022	

21	The Existence of Evidence Generation Related to Pandemics		Clinical trials of the recombinant Uzbek-Chinese vaccine-ZF-UZ-Vac2001 against coronavirus infection was conducted	In Uzbekistan, between December 12, 2020, and Jun 30, 2021 under the China-Uzbekistan partnership program, large-scale phase III clinical trials of the recombinant protein vaccine, ZF-UZ-VAC2001 were conducted to provide the population with a safe, highly efficacious vaccine as it is one of the priorities to control the disease	COVID-19 Response in Uzbekistan: From RT-PCR Test System to the Clinical Trial of Subunit Vaccine
22	Investment in Research and Development			Uzbekistan's R&D investment has significantly increased from 244.3 billion soums in 2013 to 1788.3 billion soums in 2022, reflecting a commitment to innovation. However, there was a decline in 2023 to 1407.1 billion soums. Despite this dip, the long-term trend remains positive, driven by government funding and international collaborations. Between 2013 and 2022, Uzbekistan's R&D expenditure as a percentage of GDP fluctuated, starting at 0.16% in 2013, falling to 0.11% in 2019, and recovering to 0.16% in 2022, indicating a less consistent investment pattern compared to benchmark countries.	A Decade of Progress: The Evolution of Innovation in Uzbekistan
23	Presence or Absence of Public Disclosure of Government-Funded Research and Development				
Article 10: Sustainable Manufacturing					
24	Local Manufacturing Capacity for Medical Products		"On additional measures to accelerate the development of the pharmaceutical industry of the Republic in 2022-2026" National Strategy	Domestic products make up approximately 63% of Uzbekistan's pharmaceutical market in 2024 and is projected to increase to 80% in 2026.	ON ADDITIONAL MEASURES FOR THE RAPID DEVELOPMENT OF THE REPUBLIC'S PHARMACEUTICAL INDUSTRY IN 2022 — 2026
Article 11: Technology Transfer					
25	Status of Intellectual Property Rights related to Technology Transfer			Uzbekistan has made notable progress in enhancing its intellectual property (IP) system to promote technology transfer. Integration of IP Management: In 2022, the Intellectual Property Agency was merged into the Ministry of Justice. This reorganization aims to strengthen the protection of IP rights, fight against counterfeit goods, and support the state registration of intellectual property. International Cooperation: Workshops and training events, such as the Technology Transfer Workshop held in Tashkent, have been organized to improve the understanding and application of IP rights among participants from government, universities, and the private sector.	LEGAL PROTECTION AND ENFORCEMENT OF IP IN UZBEKISTAN Uzbekistan: CLIP Holds Technology Transfer Workshop
26	Current Status of Health Systems for Access to Medical Products			<ul style="list-style-type: none"> Uzbekistan is actively reforming its health system to enhance access to medical products, focusing on primary health care and gradually introducing public health insurance by October 1, 2026, to achieve universal health care coverage. Uzbekistan's health system provides a basic set of publicly financed health services but does not yet cover all essential services or medicines; a more comprehensive package is being piloted. Public spending on health is comparatively low (US\$ 673 PPP per person in 2021) and out-of-pocket (OOP) spending is high, creating challenges in access to health services, especially for those from poorer households. Health spending is dominated by medical goods, mostly medicines (35.7% in 2019). 	Health systems in action: Uzbekistan
27	Availability of Medical Product Database			The Ministry of Health's Center for Pharmaceutical Products Safety keeps an online database that is regularly updated. This resource offers details about approved medications, medical devices, and recognized counterfeit or substandard products.	IS "THE CENTER FOR PHARMACEUTICAL PRODUCTS SAFETY" UNDER THE MINISTRY OF HEALTH OF THE REPUBLIC OF UZBEKISTAN
Article 12: PABS					
PABS is excluded as it was established after the treaty.					
Article 13: Global Supply Chain Network					
The WHO SCL network is planned to be established in the future and is therefore not applicable					
28	Disclosure of Terms of Government-funded Purchase Agreements				
Article 14: Regulation					
29	Availability of Information About each Country's Regulatory System (especially for pandemic products)	R1.1 Strategy emergency risk assessments conducted and emergency resources identified and mapped R1.2 National multisectoral multihazard emergency preparedness measures, including emergency response plans, are developed, implemented, and tested		Publicly available information on specific guidelines, standard operating procedures (SOPs), or protocols for the emergency use of unregistered medicines and vaccines, especially during pandemics, is not available.	
30	Whether the Requirements of each Country's Regulatory System are Consistent with International Standards				
31	Availability of a warning system for counterfeit products			The "Center for Pharmaceutical Products Safety" provides information regarding recognized counterfeit and substandard medical products and medical devices that are not suitable for use. This center is essential in overseeing and notifying the public about counterfeit medications.	Information on the identified counterfeit and substandard, unreliable medicines and medical devices. UzPharmControl
Article 15: Compensation and Liability Management					
the provisions of this Article were integrated into Articles 13					
Article 16: International Collaboration and Cooperation					
32	the provisions of this Article were integrated with Article 19				
Article 17: Whole-of-government and whole-of-society approaches					
33	Presence of Domestic Inter-sectoral Coordination Mechanisms	R1.1 Strategy emergency risk assessments conducted and emergency resources identified and mapped R1.2 National multisectoral multihazard emergency preparedness measures, including emergency response plans, are developed, implemented, and tested			
34	Presence or Absence of a Cross-sectoral National Pandemic Response Plan	R4.2 System in place for activating and coordinating health personnel during a public health emergency		Uzbekistan developed the COVID-19 National Strategic Preparedness and Response Plan (SPRP) in partnership with the World Health Organization (WHO) and other collaborators. This plan offered direction for handling the COVID-19 response and laid out strategies for tackling health emergencies . The SPRP was designed to guide the management of the COVID-19 response, summarizing advancements across ten pillars and concluding with priorities for future initiatives.	COVID-19 NATIONAL STRATEGIC PREPAREDNESS & RESPONSE PLAN FOR HEALTH 2020 report
35	Are there Provisions for Measures to Accommodate Vulnerable Groups?			Uzbekistan's improved social protection system offered a strong support to the most vulnerable groups across the country during the COVID-19 pandemic.	Uzbekistan's integrated social system: a powerful buffer to support the most vulnerable. UN Sustainable Development Group
Article 18: Communication and Public Awareness					
36	Availability of Arrangements for Risk Communication during a Pandemic	R5.1 Risk communication systems for unusual/unexpected events and emergencies		Uzbekistan has a risk communication plan designed for public health emergencies, established by a Cabinet of Ministers decree in August 2017. This plan includes an automated system for warning and informing the population, managed by the Ministry of Emergency Situations and funded by state and local budgets. The system comprises software and hardware for monitoring and disseminating information about emergencies , including natural disasters, technological incidents, and environmental threats, as well as public health emergencies like infectious disease outbreaks and epidemics . (P.54)	RISK COMMUNICATIONS FROM GLOBAL HEALTH SECURITY INDEX UZBEKISTAN 2023
Article 19: International cooperation and support for implementation					
	The Status of Support and Assistance Received by Countries in Response to Health Crises			Since the start of the pandemic, Uzbekistan's government has engaged in international collaboration to improve outbreak response and patient care . Delegations from several countries, including Germany, South Korea, Russia and Turkey have visited to support healthcare workers. The Robert Koch Institute conducted assessment and clinical missions to aid COVID-19 treatment . Uzbekistan is participating in an international study on COVID-19's impact on healthcare staff and is developing training programs with German partners to enhance intensive care and telemedicine capabilities.	COVID-19 in Central Asia: Uzbekistan's new approach to international cooperation
Article 20: Sustainable financing					
37	Percentage of Health Expenditure by Country			7.74% (2021)	World Health Organization Data Uzbekistan
38	Proportion of Health Expenditures Dedicated to Health Emergency Response			Specific data on the proportion of health expenditures dedicated exclusively to health emergency responses is not readily available. However, in 2021, Uzbek government allocated 3 trillion soums to combat COVID-19, which was later increased to 4.3 (approx. \$405.1 million) trillion soums , including 1.4 trillion soums for vaccine procurement and vaccination efforts. This amounted to approximately 3.1 % of the country's GDP of the country.	Data on Healthcare Expenditures in Uzbekistan in 2021 are now publicly available. UNDP Uzbekistan
39	Amount of Funding Received for Health Crisis Response			Uzbekistan received significant international funding including grants and loans to strengthen its health crisis response, particularly in addressing the COVID-19 pandemic. The donor organizations/countries include but are not limited to: Asian Infrastructure Investment Bank (AIIB) \$100 million loan (2020), Asian Development Bank (ADB) \$100 million loan (2020), International Bank for Reconstruction and Development (IBRD) \$4.08 million (2020), The Government of Japan \$1.9 million, US CDC \$2.07 million.	AIIB Approves \$100-M Loan to Uzbekistan for Healthcare Emergency Response ADP Approves \$100 Million Loan to Help Strengthen Uzbekistan's Resilience to Health Emergencies INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT Japan allocates US\$ 1.9 million to support Uzbekistan's COVID-19 response CDC Approves \$2 Million for COVID-19 Response in Uzbekistan